



## 김명수 Myungsoo KIM

전기전자공학과 / Electrical Engineering

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🌐 <https://sites.google.com/view/next2021>

### Academic Credential

Dec 2020: Ph.D., The University of Texas at Austin, Austin, TX, USA  
Department of Electrical and Computer Engineering

May 2019: M.S.E., The University of Texas at Austin, Austin, TX, USA  
Department of Electrical and Computer Engineering

May 2016: B.S., Sungkyunkwan University (SKKU), Suwon, Korea  
Department of Electronics and Electrical Engineering

### Awards/Honors/Memberships

Jan 2022: Ben Streetman Award, Senior Award, 2020–2021, UT Austin

Dec 2019: Professional Development Award, UT Austin Graduate School

Sep 2019: Best Paper Award in the area of Engineering, KSEA (Korean-American Scientists and Engineers Association) Austin Chapter

Jul 2016 - Dec 2020: Overseas Graduate Students Scholarship, Kwanjeong Educational Foundation, Seoul, Korea

## I Nano Electronics and Technology Lab 나노소자기술 연구실

Welcome to Prof. Kim's Nano Electronics and Technology Lab at UNIST (Ulsan National Institute of Science and Technology).

We are conducting basic and applied research at the frontier of nanomaterials, logic and memory devices, neuromorphic applications, flexible nanoelectronics, bioelectronics, RF integrated circuits, and electromagnetics. Our passion lies in the discovery, understanding, and application of new paradigms to enable novel ubiquitous systems that can address societal needs.

반갑습니다. 울산과학기술원 (UNIST) 김명수 교수의 나노소자기술 연구실입니다.

저희는 나노물질, 로직 및 메모리 소자, 뉴로모픽 응용, 유연소자, 바이오 소자, RF 소자와 관련된 기초 응용 연구를 진행하고 있으며, 나노소자 및 나노기술을 활용하여 새로운 패러다임의 발견, 이해, 그리고 응용을 통해 사회적 요구에 맞는 새로운 유틸리티 시스템 구현하고자 합니다.

### 관심분야

나노물질, 로직 및 메모리 소자, 뉴로모픽 응용, 유연소자, 바이오 소자, RF 소자

### 희망분야

## I Research Keywords and Topics

나노물질, 로직 및 메모리 소자, 뉴로모픽 응용, 유연소자, 바이오 소자, RF 소자

## I Research Publications

Myungsoo Kim, Emiliano Pallecchi, Ruijing Ge, Xiaohan Wu, Guillaume Ducournau, Jack C. Lee, Henri Happy and Deji Akinwande, "Analogue Switches made from Boron Nitride Monolayers for Application in 5G and Terahertz Communication Systems"; Nature Electronics, (2020).

Myungsoo Kim\*, Ruijing Ge\*, Xiaohan Wu\*, Xing Lan, Dr. Jesse Tice, Jack C. Lee and Deji Akinwande, "Zero-static power RF Switches Based on MoS<sub>2</sub> Atomrystals"; Nature Communications, (2018) (Editor's Choice)

Ruijing Ge\*, Xiaohan Wu\*, Myungsoo Kim, Jianping Shi, Sushant Sonde, Li Tao, Yanfeng Zhang, Jack C. Lee, and Deji Akinwande, "Atomrystal: Nonvolatile Resistance Switching in Atomic Sheets of Transition Metal Dichalcogenides"; Nano Letters, (2017) (ACS Editor's Choice)